

**Notice of Allowability**

Applicati n N .

10/713,377

Examiner

Brian M. Healy

Applicant(s)

HARGIS ET AL.

Art Unit

2874

-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 11/14/2003.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☒ The drawings filed on 14 November 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

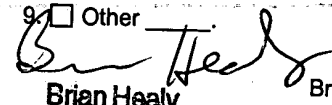
5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachm nt(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other



Brian Healy  
Primary Examiner

Brian M. Healy  
Primary Examiner  
Art Unit: 2874

**REASONS FOR ALLOWANCE**

The following is an Examiner's Statement of Reasons for Allowance: The closest prior art of record, i.e. Gilliland et. al., U.S.P. No.6,160,647 teaches (Figs.1-6) An optoelectronic transmitter/receiver device comprising: (ROSA) 106 subassembly mounted on a PC board, a (TOSA) 104 mounted on a second circuit board that is mounted on a main transceiver PC circuit board which also includes a control circuit 200 with an amplifier U2 that utilizes differential voltage levels to drive a semiconductor laser.

Gilliland et. al. 647' does not teach or suggest the claimed structure which is recited in Applicant's (ROSA) device (as is recited in claim 1) comprising: an optical coupler for receiving an optical signal from an optical waveguide along an optical axis; a photodiode disposed along the optical axis for receiving the optical signal and for converting the optical signal into an electrical current signal; an amplifier for converting the electrical current signal into a differential voltage signal having the photodiode mounted thereon; a substrate having a first surface of which is connected to the optical coupler and a second surface of which supports the amplifier whereby the optical signal from the first surface through the substrate to the photodiode mounted on the amplifier; an electrical connector connected to the second surface for electrically connecting the amplifier to the host opto-electronic device.

Independent 16 includes the same limitations as that of claim 1. Dependent claims 2-15 and 17-20 also includes the limitations of either claims 1 or 16 as well as additional limitations

Art Unit: 2874

(See dependent claims for these specific details). Claim 21 recites an optical sub-assembly comprising: an optical coupler for transmitting an optical signal between the optical waveguide and the optical sub-assembly along an optical axis; a transducer disposed along the optical axis for converting electrical signals from the opto-electronic device to optical signals, a transducer control chip for converting the electrical current signal from the transducer into a differential voltage signal or for driving the transducer to produce optical signals; a substrate with a first surface of which supports the transducer control chip and electrical connector connected to the second surface for electrically connecting the transducer control chip to the host opto-electronic device. The limitations of claims 1-21 have been found to be patentably distinct from the teachings of Gilliland et. al. '647 and all of the listed prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

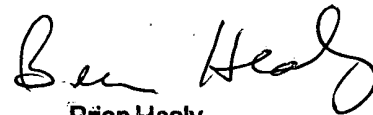
Any inquiry concerning the merits of this communication should be directed to Examiner Brian M. Healy Examiner at telephone number (571)272-2347 The Examiner's normal work schedule is Tuesday through Friday, 6:30 AM to 5:00 PM. Any inquiry of a general or clerical nature (i.e. a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at telephone number (703) 308-0956, to the technical support staff

**Art Unit: 2874**

supervisor (Team 2) at telephone number (703) 308-3072, or to the Technology Center 2800 Customer Service Office at telephone number (703) 306-3329.

**BRIAN M. HEALY**  
**Primary Patent Examiner**  
**Group Art Unit 2874**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Ouchi et. al., U.S.P. No. 5,659,560 (Figs.1-50), Nazarathy et. al., U.S.P. No. 5,161,044 (Figs.1-19), Mizutani, U.S.P. No. 6,526,075 (Figs.1-15) and He et. al., U.S.P. No. 6,657,272 (Figs.1-8).



**Brian Healy**  
**Primary Examiner**